

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/20127

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : B63B 39/00, 35/44
US CL : 405/204; 114/264

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 405/204, 195.1, 196, 200, 203, 205, 223.1, 224, 209; 114/264, 65R

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|-----------------------|
| Y | US 5722797 A (HORTON, III) 03 March 1998, (03.03.1998), see entire document. | 1-23 |
| Y | US 4,217848 A (MEYER-HAAKE) 19 August 1980, (19.08.1980), see entire document. | 1-23 |
| Y | US 2002/0154954 A1 (HUANG et al.) 24 October 2002, (24.10.2002), see entire document | 4, 5, 20 |
| Y | US 3,986,471 A (HASELTON) 19 October 1976 (19.10.1976), see entire document. | 4, 5, 20 |
| Y | US 4,938,630 A (KARSAN et al.) 03 July 1990, (03.07.1990), see entire document. | 4, 5, 20 |

Further documents are listed in the continuation of Box C. See patent family annex.

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Date of the actual completion of the international search Date of mailing of the international search report

15 June 2004 (15.06.2004)

01 JUL 2004

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